

T. A. Foster  
Dr. Y. L. Power  
J. A. Schmid  
T. L. Schrenk  
R. N. Taylor  
P. Thistleton  
J. F. Thomas  
R. J. Zipfel  
File 1.1.7.3

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Complainant's Exhibit No. 92
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PERSONAL AND CONFIDENTIAL

TO: T. M. KEMP.

FROM: J. G. LOSCHIAVO *J. G. L.*

UPDATE ON THE C-8 BLOOD SAMPLING PROGRAM

An overall drop in blood C-8 levels is observed in TEFLON® Fine Powder/Dispersion and FEP Operators. This drop in blood C-8 levels is statistically significant. In Table 1, it can be noted that 16 out of 22 Fine Powder/Dispersion Operators experienced a drop in blood C-8 levels. An additional two Operators experienced no change. The four remaining Operators experienced increases.

In Table 2, it can be noted that 14 out of 15 FEP Operators experienced a drop in blood C-8 levels. The significant downward trends experienced by both groups of Operators are very encouraging.

Data on individuals who left TEFLON® indicate that the biological half-life of C-8 in the blood (i.e., the time it takes to reduce blood C-8 level by 50%) is approximately two years.

DISCUSSION

The attached Tables contain blood C-8 data for TEFLON® Fine Powder/Dispersion and FEP Operators. Blood C-8 data were obtained from the FLAIR (Fluoropolymers Laboratory Analysis Information Retrieval) program. All blood samples were analyzed by the C-8 specific method. Data recorded in FLAIR up to 7/14/83 are included in this report. Only data on Operators who have worked in TEFLON® at least 730 days as of the first of the two listed sample dates are included since new Operators will experience increasing blood C-8 levels until an equilibrium level is reached.

TABLE 1  
TEFLON® FINE POWDER/DISPERSION OPERATORS  
C-8 BLOOD SAMPLE RESULTS

<u>DATE OF FIRST SAMPLE</u>	<u>C-8 IN BLOOD (PPM)</u>	<u>DAYS IN JOB AT SAMPLE DATE</u>	<u>DATE OF SECOND SAMPLE</u>	<u>C-8 IN BLOOD (PPM)</u>	<u>DAYS IN JOB AT SAMPLE DATE</u>
1/14/82	26.0	9,358	1/12/83	20.0	9,721
2/18/82	24.0	2,332	2/17/83	25.0	2,696 <i>done</i>
10/8/81	11.0	9,260	11/3/82	8.2	9,651
8/7/81	9.4	2,379	8/6/82	7.9	2,743
10/1/81	8.2	5,813	9/29/82	6.5	6,176
2/11/82	7.0	1,989	2/10/83	7.7	2,353 <i>done</i>
8/12/81	6.9	1,743	7/15/82	5.9	2,080
4/2/82	5.6	8,311	3/2/83	4.2	8,645
1/7/82	4.4	5,765	1/7/83	4.9	6,130 <i>done</i>
4/6/81	4.3	857	5/12/82	5.6	1,258 <i>up</i>
3/11/82	3.9	800	3/10/83	3.6	1,164
12/30/81	3.6	962	12/27/82	2.7	1,324
8/19/81	3.5	871	8/17/82	2.1	1,234
3/26/82	2.9	8,242	3/18/83	2.8	8,599
12/2/81	2.8	2,256	12/2/82	2.8	2,621
3/11/82	2.6	1,621	4/6/83	2.4	2,012
7/16/81	2.5	5,652	6/17/82	1.8	5,988
7/16/81	2.5	1,705	6/30/82	2.5	2,054
4/6/81	2.1	918	1/19/82	1.6	1,206
3/3/82	1.6	5,880	3/22/83	1.5	6,264
2/9/82	1.5	770	2/10/83	1.2	1,136
10/9/81	1.3	1,803	10/6/82	1.1	2,165

$\bar{X} = 6.3 \text{ ppm}$

$\bar{X} = 5.5 \text{ ppm}$

16 out of 22 employees experienced decreased blood C-8 levels.  
2 out of 22 employees experienced no change in blood C-8 levels.  
4 out of 22 employees experienced increased blood C-8 levels.

Decrease in C-8 in blood levels is statistically significant at  $p = 0.05$  level.

TABLE 2  
TEFLON® FEP OPERATORS  
C-8 BLOOD SAMPLE RESULTS

<u>DATE OF FIRST SAMPLE</u>	<u>C-8 IN BLOOD (PPM)</u>	<u>DAYS IN JOB AT SAMPLE DATE</u>	<u>DATE OF SECOND SAMPLE</u>	<u>C-8 IN BLOOD (PPM)</u>	<u>DAYS IN JOB AT SAMPLE DATE</u>
4/7/81	4.5	1,284	4/22/82	3.7	1,664
2/2/82	3.1	9,438	2/21/83	2.8	9,822
4/15/82	2.1	8,917	4/14/83	1.5	9,281
1/27/82	1.8	9,249	1/26/83	1.1	9,613
12/16/81	1.8	1,977	1/12/83	1.6	2,369
4/7/81	1.7	827	9/15/82	1.4	1,353
4/21/81	1.25	732	10/9/81	1.20	903
3/31/82	0.95	5,813	4/26/83	0.79	6,204
10/28/81	0.86	899	5/16/83	0.75	1,464
10/15/81	0.75	1,807	10/14/82	0.72	2,171
3/17/82	0.52	5,417	3/17/83	0.44	5,782
8/26/81	0.51	891	7/29/82	0.48	1,228
2/25/82	0.42	2,387	5/16/83	0.39	2,832
8/28/81	0.41	861	8/26/82	0.46	1,224 <i>Don</i>
10/28/81	0.38	1,927	10/26/82	0.36	2,290

$\bar{X} = 1.4$  ppm

$\bar{X} = 1.2$  ppm

14/15 employees experienced decreased blood C-8 levels.

Decrease in C-8 in blood levels is statistically significant at  $p = 0.05$  level.

TABLE 3

EMPLOYEES WHO LEFT TEFLON® JOBS

<u>C-8 IN BLOOD WHEN LEFT TEFLON® (PPM)</u>	<u>C-8 IN BLOOD AT A LATER DATE (PPM)</u>	<u>DAYS ELAPSED BETWEEN SAMPLES</u>	<u>REASON FOR LEAVING TEFLON®</u>
19.0	16.0	3.0 128	Retired from Company
3.8	2.2	1.6 780	Retired from Company
2.1	2.2*	0 333	Retired from Company
0.57	0.14	33 730	Transferred to another WW Division
0.14	0.08	0.6 759	Transferred to another WW Division

\*This 5% increase in C-8 blood levels is likely due to analytical error and will be considered as a 0% drop in blood C-8.

Biological half-life of C-8 in blood based on these 5 data points is 2.1 years.